What is claimed is:

1.   A system for providing dynamic screening of transient messages in a distributed computing environment, comprising:

an antivirus system intercepting an incoming message at a network domain boundary, the incoming message including a header comprising a plurality of address fields storing contents;

a stored set of blocking rules, each blocking rule defining readily-discoverable characteristics indicative of messages infected with at least one of a computer virus, malware and bad content;

a parser module identifying the contents of each address field;

a comparison module checking the contents of each address field against the blocking rules to screen infected messages and identify clean messages; and

an intermediate message queue staging each such clean message pending further processing.

2.   A system according to Claim 1, further comprising:

a message receiver discarding each such infected message without further processing.

3.   A system according to Claim 1, wherein each such blocking rule is specified as a regular expression containing at least one of literal and wildcard values.

4.   A system according to Claim 1, further comprising:

an antivirus scanner scanning each message in the intermediate message queue for at least one of a computer virus, malware and bad content.

5.   A system according to Claim 4, further comprising:

an event handler performing each scanning operation as an event responsive to each such clean message staged in the intermediate message queue.

6.   A system according to Claim 1, further comprising:

2   a gateway receiving the incoming messages into the network domain

3   boundary.

1   7.   A system according to Claim 1, wherein the structured fields

2   comprise at least one of sender, recipient, copied recipient, blind copied recipient,

3   date, time, and subject.

1   8.   A system according to Claim 1, wherein the incoming message

2   comprises at least one attachment.

1   9.   A system according to Claim 1, wherein the distributed computing

2   environment is TCP/IP-compliant and each incoming message is SMTP-

3   compliant.

1   10.   A method for providing dynamic screening of transient messages

2   in a distributed computing environment, comprising:

3   intercepting an incoming message at a network domain boundary, the

4   incoming message including a header comprising a plurality of address fields

5   storing contents;

6   maintaining a set of blocking rules, each blocking rule defining readily-

7   discoverable characteristics indicative of messages infected with at least one of a

8   computer virus, malware and bad content;

9   identifying and checking the contents of each address field against the

10   blocking rules to screen infected messages and identify clean messages; and

11   staging each such clean message into an intermediate message queue

12   pending further processing.

1   11.   A method according to Claim 10, further comprising:

2   discarding each such infected message without further processing.

1   12.   A method according to Claim 10, further comprising:

2   specifying each such blocking rule as a regular expression containing at

3   least one of literal and wildcard values.

1   13.   A method according to Claim 10, further comprising:

2   scanning each message in the intermediate message queue for at least one

3 of a computer virus, malware and bad content.

1   14.   A method according to Claim 13, further comprising:

2   performing each scanning operation as an event responsive to each such

3 clean message staged in the intermediate message queue.

1   15.   A method according to Claim 10, further comprising:

2   receiving the incoming messages at a gateway into the network domain

3 boundary.

1   16.   A method according to Claim 10, wherein the structured fields

2 comprise at least one of sender, recipient, copied recipient, blind copied recipient,

3 date, time, and subject.

1   17.   A method according to Claim 10, wherein the incoming message

2 comprises at least one attachment.

1   18.   A method according to Claim 10, wherein the distributed

2 computing environment is TCP/IP-compliant and each incoming message is

3 SMTP-compliant.

1   19.   A computer-readable storage medium holding code for performing

2 the method according to Claims 10, 11, 12, 13, 14, 15, 16, 17, or 18.

1   20.   A system for efficiently detecting computer viruses and malware at

2 a network domain boundary, comprising:

3   an antivirus system receiving an incoming message packet from a sending

4 client at a network domain boundary through an open connection, the incoming

5 message packet comprising a header including fields, which each store field

6 values;

7   a message receiver comprising:

8   a parser module parsing the field values from each field in the

9   header of each incoming message packet by extracting tokens representing the

10   field values;

11   a comparison module comparing the tokens to characteristics

12   indicative of at least one of a computer virus and malware to identify screened

13   incoming message packets, and forwarding each screened incoming message

14   packet.

1   21.   A system according to Claim 20, wherein each incoming message

2   packet further comprises a body storing message content, further comprising:

3   an antivirus scanner scanning the message content of the body of each

4   screened incoming message packet for at least one of a computer virus and

5   malware to identify uninfected screened incoming message packets, and

6   forwarding each uninfected screened incoming message packet.

1   22.   A system according to Claim 20, further comprising:

2   a message queue enqueueing each screened incoming message packet.

1   23.   A system according to Claim 20, wherein the antivirus system

2   closes the open connection to the sending client of each non-screened incoming

3   message packet.

1   24.   A system according to Claim 20, wherein the comparison module

2   analyzes at least one of a sender, recipient, copied recipient, blind copied

3   recipient, date, time, and subject field in the header of each incoming message

4   packet.

1   25.   A system according to Claim 20, wherein the comparison module

2   applies blocking rules to the field values of the header of each incoming message

3   packet.

1   26.   A system according to Claim 20, wherein the distributed

2   computing environment is TCP/IP-compliant and each incoming message packet

3   is SMTP-compliant.

1   27.   A method for efficiently detecting computer viruses and malware

2   at a network domain boundary, comprising:

3   receiving an incoming message packet from a sending client at a network

4   domain boundary through an open connection, the incoming message packet

5   comprising a header including fields, which each store field values;

6   parsing the field values from each field in the header of each incoming

7   message packet by extracting tokens representing the field values;

8   comparing the tokens to characteristics indicative of at least one of a

9   computer virus and malware to identify screened incoming message packets; and

10   forwarding each screened incoming message packet.

1   28.   A method according to Claim 27, wherein each incoming message

2   packet further comprises a body storing message content, further comprising:

3   scanning the message content of the body of each screened incoming

4   message packet for at least one of a computer virus and malware to identify

5   uninfected screened incoming message packets; and

6   forwarding each uninfected screened incoming message packet.

1   29.   A method according to Claim 27, further comprising:

2   enqueueing each screened incoming message packet onto a message

3   queue.

1   30.   A method according to Claim 27, further comprising:

2   closing the open connection to the sending client of each non-screened

3   incoming message packet.

1   31.   A method according to Claim 27, further comprising:

2   analyzing at least one of a sender, recipient, copied recipient, blind copied

3   recipient, date, time, and subject field in the header of each incoming message

4   packet.

1   32.   A method according to Claim 27, further comprising:

2   applying blocking rules to the field values of the header of each incoming

3   message packet.

1   33.   A method according to Claim 27, wherein the distributed

2   computing environment is TCP/IP-compliant and each incoming message packet

3   is SMTP-compliant.

1   34.   A computer-readable storage medium holding code for performing

2   the method according to Claims 27, 28, 29, 30, 31, 32, or 33.